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MYOCARDIAL ISCHEMIA AND INFARCTION

INFARCT SIZE ASSESSED IN CARDIAC MAGNETIC RESONANCE IN STEMI PATIENTS TREATED WITH PCI: CARESS IN AMI SUBSTUDY

ACC Poster Contributions
Ernest N. Morial Convention Center, Hall F
Tuesday, April 05, 2011, 9:30 a.m.-10:45 a.m.

Session Title: Acute Myocardial Infarction -- Door to Balloon Time and Patient Transfer
Abstract Category: 3. Acute Myocardial Infarction—Therapy
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Background: Thrombolysis remains the treatment of choice in ST-segment elevation myocardial infarction (STEMI) when primary percutaneous coronary intervention (PCI) cannot be performed timely fashion. Immediate transfer of high risk STEMI patients treated with half-dose reteplase and abciximab from nonPCI hospitals to high volume PCI centers maintains at 12 months a 30.7% relative risk reduction of the composite clinical end-point in CARESS in AMI study. However, it's the influence of such therapy on infarct size and left ventricle function remains unclear. The aim of our study was to evaluate infarct size, ejection fraction, end-systolic (ESVI) and end-diastolic (EDVI) left ventricle volumes indices by cardiac magnetic resonance (CMR) in patients from CARESS in AMI study who completed 12-month follow-up.

Methods: In CARESS in AMI study patients with STEMI were treated with half-dose reteplase, abciximab, heparin, and aspirin, and randomly assigned to immediate transfer to the nearest interventional centre for PCI (immediate PCI group), or to the management in the local non-PCI hospital with transfer only in cases of persistent ST-segment elevation or clinical deterioration (standard care/rescue PCI group). For the purpose of presented analysis CMR was performed in patients without contraindications at 12-months.

Results: A total of 85 patients undergone CMR study (44 patients from immediate PCI group and 41 from standard care/rescue PCI group). Baseline characteristics were similar in both groups. There were no differences in the infarct size (standard care/rescue PCI vs. immediate PCI group) (11.4±9.4% vs 12.1±9.7%, p=0.7), LV ejection fraction (46.3±11.4% vs. 47.5±12.0%,p=0.65), ESVI: 46.24 vs.48.4±30 ml/m2, p=0.6) and EDVI (83.3±24vs.86.5±31 ml/m2, p=0.6), and) between the two study groups.

Conclusions: Immediate PCI following thrombolysis provided clinical benefit especially recurrent ischemia, but this strategy did not reduce the infarct size.